

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/011504

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K33/00 A61P43/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBASE, CHEM ABS Data, BIOSIS, WPI Data, PAJ, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/53192 A (PETZELT CHRISTIAN ;KOX WOLFGANG J (DE); AGA AB (SE)) 14 September 2000 (2000-09-14) cited in the application page 1 page 11, paragraph 3 - paragraph 4 claims 10,12-18	1,5-11
X	BREITHARDT G ET AL: "ELECTRON MICROSCOPIC FINDINGS IN ATRIA OF GUINEA-PIGS AFTER PRESERVATION IN VARIOUS GASES AND GAS MIXTURES" VIRCHOWS ARCHIV B CELL PATHOLOGY, vol. 10, no. 3, 1972, pages 210-228, XP008027860 the whole document ----- -/--	1,2,5, 7-11

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

5 April 2005

Date of mailing of the international search report

29. 07. 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BRAUN R. ET AL: "[Cryoprotective properties of various gases in kidney preservation]. UBER KRYOPROTEKTIVE EIGENSCHAFTEN EINIGER GASE." UROLOGIA INTERNATIONALIS, 28/3-5 (166-171). CODEN: URINAC, 1973, XP008027858 abstract page 75, paragraph 2 -----	1,2,7,8, 10,11
X	SUESSKAND K. ET AL: "[Comparison of morphological and biochemical findings in the atrial and ventricular muscle of guinea pigs, after reserpine treatment, after starvation, and in control animals]. VERGLEICHENDE MORPHOLOGISCHE UND BIOCHEMISCHE UNTERSUCHUNGEN VON UBERLEBENDEN VORHOFEN UND PAPILLARMUSKELN DES HERZENS VON" VIRCHOWS ARCHIV ABTEILUNG B CELL PATHOLOGY, 26/1 (73-92). CODEN: VAAZA2, 1977, XP008027859 page 75, paragraph 2 -----	1,2,5,7, 10,11
X	US 6 475 716 B1 (SEKI KUNIHIRO) 5 November 2002 (2002-11-05) column 1, line 18 - column 21 column 8, paragraph 2 -----	1,2
X	PETZELT C ET AL: "Prevention of neurotoxicity in hypoxic cortical neurons by the noble gas xenon" LIFE SCIENCES 14 MAR 2003 UNITED STATES, vol. 72, no. 17, 14 March 2003 (2003-03-14), pages 1909-1918, XP001176648 ISSN: 0024-3205 cited in the application abstract page 1917, paragraph 2 -----	1,7,10
X	WILHELM S ET AL: "EFFECTS OF XENON ON IN VITRO AND IN VIVO MODELS OF NEURONAL INJURY" ANESTHESIOLOGY, AMERICAN SOCIETY OF ANESTHESIOLOGISTS, PHILADELPHIA, PA., US, vol. 96, no. 6, June 2002 (2002-06), pages 1485-1491, XP009015267 ISSN: 0003-3022 page 1485, column 1, paragraph 2 page 1486, column 2, paragraph 3 page 1489, column 1, paragraph 2 -----	1,5-7, 10,11

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PCT/EP2004/011504

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MA D ET AL: "NEUROPROTECTIVE AND NEUROTOXIC PROPERTIES OF THE 'INERT' GAS, XENON" BRITISH JOURNAL OF ANAESTHESIA, BJM PUBLISHING GROUP, LONDON, GB, vol. 89, no. 5, November 2002 (2002-11), pages 739-746, XP009015259 ISSN: 0007-0912 page 740, column 2, paragraph 2 page 743, column 1, paragraph 2 - page 744, column 1, paragraph 1 -----	1,5-7, 10,11
X	DAVID H.N. ET AL: "Reduction of ischemic brain damage by nitrous oxide and xenon." JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM, 23/10 (1168-1173)., 1 October 2003 (2003-10-01), XP008027594 page 1169, column 1, paragraph 4 page 1170, column 2, paragraph 3 -----	1,5,7, 9-11
X	WO 02/09731 A (LECOURT LAURENT ;LEMAIRE MARC (FR); L AIR LIQUIDE SANTE INTERNATIO) 7 February 2002 (2002-02-07) claim 7 -----	10,11
X	US 5 228 434 A (FISHMAN ROYCE S) 20 July 1993 (1993-07-20) claim 1 -----	10,11

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Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1, 5-9 (all partially), 2, 10-11

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 5-9 (all partially), 2, 10-11

Use of xenon for the preparation of a pharmaceutical composition for preventing or reducing cellular damage of tissue or organs to be transplanted and method of preparing a pharmaceutical preparation by mixing xenon with another gas harmless to humans

2. claims: 1, 5-9 (all partially), 3

Use of xenon for the preparation of a pharmaceutical composition for preventing or reducing apoptotic cell death after eye laser surgery

3. claims: 1, 5-9 (all partially), 4

Use of xenon for the preparation of a pharmaceutical composition for protecting endothelial cells of the intestine in sepsis

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0053192	A	14-09-2000	DE 19910986 A1	21-09-2000
			AT 248599 T	15-09-2003
			AU 757361 B2	20-02-2003
			AU 3287500 A	28-09-2000
			BG 105889 A	30-04-2002
			BR 0010456 A	27-08-2002
			CA 2367136 A1	14-09-2000
			CN 1359296 A ,C	17-07-2002
			CZ 20013234 A3	12-06-2002
			DE 60004974 D1	09-10-2003
			DE 60004974 T2	22-07-2004
			DK 1158992 T3	29-12-2003
			EE 200100480 A	16-12-2002
			WO 0053192 A1	14-09-2000
			EP 1158992 A1	05-12-2001
			ES 2206202 T3	16-05-2004
			HK 1048073 A1	03-06-2005
			HU 0201393 A2	28-09-2002
			JP 2002538209 A	12-11-2002
			MD 20010349 A	28-02-2002
			NO 20014379 A	07-11-2001
			PL 350618 A1	27-01-2003
			PT 1158992 T	30-01-2004
			SI 1158992 T1	29-02-2004
			SK 12792001 A3	02-07-2002
			US 2003180375 A1	25-09-2003
			US 6559190 B1	06-05-2003
			ZA 200107291 A	03-12-2002

US 6475716	B1	05-11-2002	CN 1505474 A	16-06-2004
			EP 1380207 A1	14-01-2004
			WO 02069702 A1	12-09-2002
			US 2003022148 A1	30-01-2003

WO 0209731	A	07-02-2002	FR 2812197 A1	01-02-2002
			AU 7855801 A	13-02-2002
			EP 1307208 A1	07-05-2003
			WO 0209731 A1	07-02-2002

US 5228434	A	20-07-1993	US 5099834 A	31-03-1992
			AT 135201 T	15-03-1996
			BR 9201376 A	21-09-1993
			CA 2062137 A1	17-01-1993
			DE 69208957 D1	18-04-1996
			DE 69208957 T2	02-10-1996
			DK 523315 T3	29-07-1996
			EP 0523315 A1	20-01-1993
			ES 2084856 T3	16-05-1996
			IL 101118 A	05-12-1996
			JP 2579262 B2	05-02-1997
			JP 5097683 A	20-04-1993
			KR 9705182 B1	14-04-1997
			MX 9200902 A1	01-01-1993
			NO 920818 A	18-01-1993
